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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,193	11/19/2001	Manuel Barbosa	11017-0003	8121

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EXAMINER

NGUYEN, XUAN LAN T

ART UNIT PAPER NUMBER

3683

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/988,193	<b>Applicant(s)</b> BARBOSA, MANUEL	
	<b>Examiner</b> Lan Nguyen	<b>Art Unit</b> 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4,6,7 and 15-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4,6,7 and 15-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>Translation DE 4203173</u> .           |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claims 21-23 are depending from a cancelled claim 1.
- The preamble of claim 24 is not the same as the preamble of claim 4 from which claim 24 is depending from.
- It is believed that Applicant intended for claims 21-24 to depend from claim 20. To further prosecution, claims 21-24 are being treated as depending from claim 20.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 4 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaneshiro et al.

Art Unit: 3683

Re: claim 4, Kaneshiro et al. show a backing plate for a drum brake assembly, as in the present invention, comprising: an abutment plate 5, 6 comprising a first part 6 configured to be attached to an axle housing of a vehicle and a second part 5 extending from said first part 6 and configured to receive braking forces applied thereto by brake shoes 7a, 7b during braking and transmit said braking forces to said first part, and a shielding plate 2 extending radially beyond said abutment plate and configured to shield brake components, wherein said shielding plate is configured to support said brake shoes and a hydraulic cylinder 4 for operating said brake shoes, said abutment and shielding plates are made of different materials, and said shielding plate is made of damped steel that dampens noise and vibrations, as disclosed in page 6 of the translation. Note that the claimed feature "configured to be attached" has been treated broadly as recited by Applicant; wherein first part 6 of Kaneshiro is "configured to be attached" to the axle housing via a number of parts in between the first part and the axle housing so that the brake assembly would be operating properly.

Re: claim 20, Kaneshiro et al. show a drum brake assembly, as in present invention, comprising: a shielding plate 2 made of a vibration dampening material that dampens noise and vibrations, said shielding plate being configured to support and shield brake components including drum brake shoes 7a, 7b and a hydraulic cylinder 4 for operating said drum brake shoes, an anchor block 5 for engaging ends of said brake shoes, and an abutment plate 6 having a first part configured to be attached to an axle housing of a vehicle and a second part extending from said first part and engaging said anchor block, as shown in figure 1, to receive braking forces applied thereto by said

Art Unit: 3683

brake shoes during braking and to transmit said braking forces to said first part, said abutment and shielding plates being made of different materials, as disclosed in page 6.

Note that Kaneshiro discloses element 6 to be a retainer plate for anchor block 5. As illustrated in figure 1, retainer plate 6 having a first part configured to be attached to an axle housing of a vehicle via the shielding plate and a second part extending from said first part and engaging said anchor block to retain said anchor block.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 7, 18, 19 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneshiro et al.

Re: claims 7 and 22, Kaneshiro's backing plate and drum brake assembly, as rejected in claims 4 and 20, is silent of the material for the abutment plate. The Examiner takes an Official Notice that steel is an old and well-known material to be used in the construction of brake assemblies due to its durability and strength. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Kaneshiro's abutment plate using steel since steel is an old and well known material to be used in the construction of brake assemblies due to its durability and strength.

Re: claims 18, 19, 23 and 24, the thicknesses of the steel and the damped steel are considered design choices and would have depended on the requirements of each application to dampen the required vibration and noise. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Kaneshiro's abutment plate and shielding plate with certain thicknesses in order to satisfy different requirements of each application to dampen the required vibration and noise.

7. Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneshiro et al. in view of Hansen et al.

Kaneshiro's backing plate assembly and shielding plate, as rejected in claims 4 and 20, lack the claimed feature of two layers of steel of approximately equal thickness. Hansen et al. teach the structure of a damped steel wherein the two outer steel sheets are of equal thickness in column 3, lines 60-63. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed Kaneshiro's backing plate assembly and shielding plate with a damped steel such as taught by Hansen et al.; since said damped steel which consists of two outer steel sheets of equal thickness exhibits superior dampening capability over a wide range of temperature as taught by Hansen and would increase the performance and prolong the life of the backing plate assembly and of the shielding plate of Kaneshiro's drum brake assembly.

8. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buchholz et al. (DE4203173) in view of Kaneshiro et al.

Re: claim 15, Buchholz et al. show a drum brake, as in the present invention, comprising: an abutment plate 4 comprising a sheet of material having a first part surrounding bolt holes 16 configured to attach to an axle housing and a second part surrounding the anchor block 8 configured to receive braking forces applied by brake shoes and transmit said braking forces to said first part, and a shielding plate 5 attached to said abutment plate 4 and configured to support said brake shoes 7, 7, wherein said abutment plate 4 and said shielding plate 5 are constructed to dampen vibrations and noise, as stated in the Abstract. Buchholz is silent of the materials being used for the abutment plate and the shielding plate. Kaneshiro teaches the concept of using a vibration dampening material in the construction of the shielding plate to reduce vibration and noise in a brake system. The Examiner takes an Official Notice that steel is an old and well-known material to be used in the construction of brake assemblies. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the teaching of Kaneshiro by using the vibration dampening material in the construction of the shielding plate of Buchholz and using steel for the construction of the abutment plate of Buchholz in order to improve the vibration and noise dampening capability of the brake assembly as taught by Kaneshiro, at the same time using a well known and readily available material of steel for the abutment plate.

Re: claim 16, Buchholz shows said shielding plate 5 is configured to receive a hydraulic cylinder 9.

Re: claim 17, Kaneshiro teaches said sound dampening material comprises damped steel comprising two sheets of steel, as described in page 6.

***Response to Arguments***

9. Applicant's arguments filed 4/18/05 have been fully considered but they are not persuasive. Applicant argues that Kaneshiro shows a backing plate and an anchor block without an abutment plate. In the new claim 20, the claimed abutment plate and anchor block have been treated accordingly. Applicant further argues that Buchholz does not show an abutment plate with one part engaging the housing and a second part receiving the braking forces. In figures 1-3, particularly figure 3, Buchholz shows abutment plate 4 engaging the housing by bolts with bolt holes 16 and receiving the braking forces at portion 12 where the anchor block 8 is located. The rejections are still deemed proper and are repeated above.

10. Applicant is reminded of Revised Amendment Practice 37 CFR 1.121, effective 7/30/2003, wherein a complete listing of claims must be presented in an Amendment.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on M-F, 8 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lan Nguyen  
Primary Examiner  
Art Unit 3683

*Lan Nguyen*  
6/1/05